DRAFT Roadway Restriping Guide to Providing Bicycle Facilities

Arlington BAC/TAC Roadway Restriping Working Group

STREET Lake Street - section #1 **CURB-TO-CURB WIDTH** 30' - 35'

	YES	NO
1. Is the roadway part of the designated bike network* in the Town?	[X] Go to Question #2-4	[ ] Bike facility not necessary or appropriate
2. ~~Parking allowed on both sides: is the roadway~~ at least 44' in width	[ ] Go to Bike Lane Design Guide	[ ] See Shared Lane Marking Matrix
3. ~~Parking allowed on one side: is the roadway~~ at least 36' in width	[ ] Go to Bike Lane Design Guide	[ ] See Shared Lane Marking Matrix
3. Parking prohibited: is the roadway at least 28' in width	[X] Go to Bike Lane Design Guide	[ ] See Shared Lane Marking Matrix

* - network includes: Mass Ave, Park Ave, Summer Street, Lowell Street, Gray Street, Mill Street, Jason Street, Pleasant Street, Mystic Street, Mystic Valley Parkway (DCR), Medford Street, Broadway, Warren Street, Bates Road, River Street and Lake Street

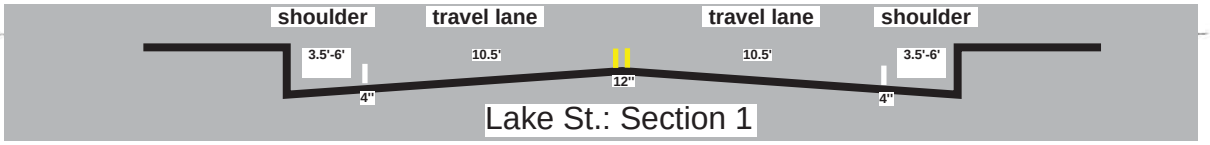
Shared Lane Marking Placement Matrix

Posted or 85th percentile roadway speed (whichever is lower)	Shared lane marking placement	
	Curb-side travel lane < 13'	curb-side travel lane ≥ 13'
≤ 25 mph without parking	center of travel lane	4'-0" from curb
≤ 25 mph with parking	center of travel lane	11'-0" from curb
26 – 35 mph without parking	4'-0" from curb **	4'-0" from curb
26 – 35 mph with parking	11'-0" from curb **	11'-0" from curb
> 35 mph with or without parking	SLM not appropriate	SLM not appropriate

** - there is a certain trade off that will need to be acknowledged as SLM placement 4' or 11' from the curb within travel lanes <13' will suffer more wear and tear, but very few cyclists should be encouraged to ride in the center of the travel lane when speeds typically exceed 26 mph.

shoulder

No MBTA Bus Routes,
Truck Exclusion
Speed Limit; 25 mph
Length ~710



DRAFT Context-sensitive Bike Lane Design Guide

Arlington BAC/TAC Roadway Restriping Working Group

STREET Lake Street - section #1 **CURB-TO-CURB WIDTH** varies 30' - 35'

	NO	YES	
TRAVEL LANE →		X	start with: 10'-0"
Limited* or no bus/truck traffic?	☐	☐	no change
Moderate** bus/truck traffic?	☐	X	add 6"
Frequent*** bus/truck traffic?	☐	☐	add12"
- OR -			
Typical traffic speeds <30 mph?	☐	X	no change
Typical traffic speeds 30-40 mph?	☐	☐	add 6"
Typical traffic speeds >40 mph?	☐	☐	add 12"
SUB-TOTAL		**10.5'**	
BIKE LANE →		X	start with: 5'-0"
Absence of curb-side parking?	☐	X	OK to subtract 6"
Limited* or no bus/truck traffic?	☐	☐	OK to subtract 6"
Moderate** bus/truck traffic?	☐	X	no change
Frequent*** bus/truck traffic?	☐	☐	add 6"
Typical traffic speeds <30 mph?	☐	☐	no change
Typical traffic speeds 30-40 mph?	☐	☐	no change
Typical traffic speeds >40 mph?	☐	☐	add 6"
SUB-TOTAL		**4.5'**	
PARKING LANE None - No Parking Allowed →		X	start with: 7'-6"
No storefront retail along street?	☐	X	OK to subtract 6"
Some areas of storefront retail?	X	☐	no change
Continuous storefront retail?	X	☐	add 6-12" depending on level of turnover
Significant downhill stretch? (higher cycling speeds when >2%)	X	☐	add 6"
Significant uphill stretch? (lower cycling speeds when >2%)	X	☐	OK to subtract 6"
SUB-TOTAL		**NA**	

IDEAL TOTAL ☐

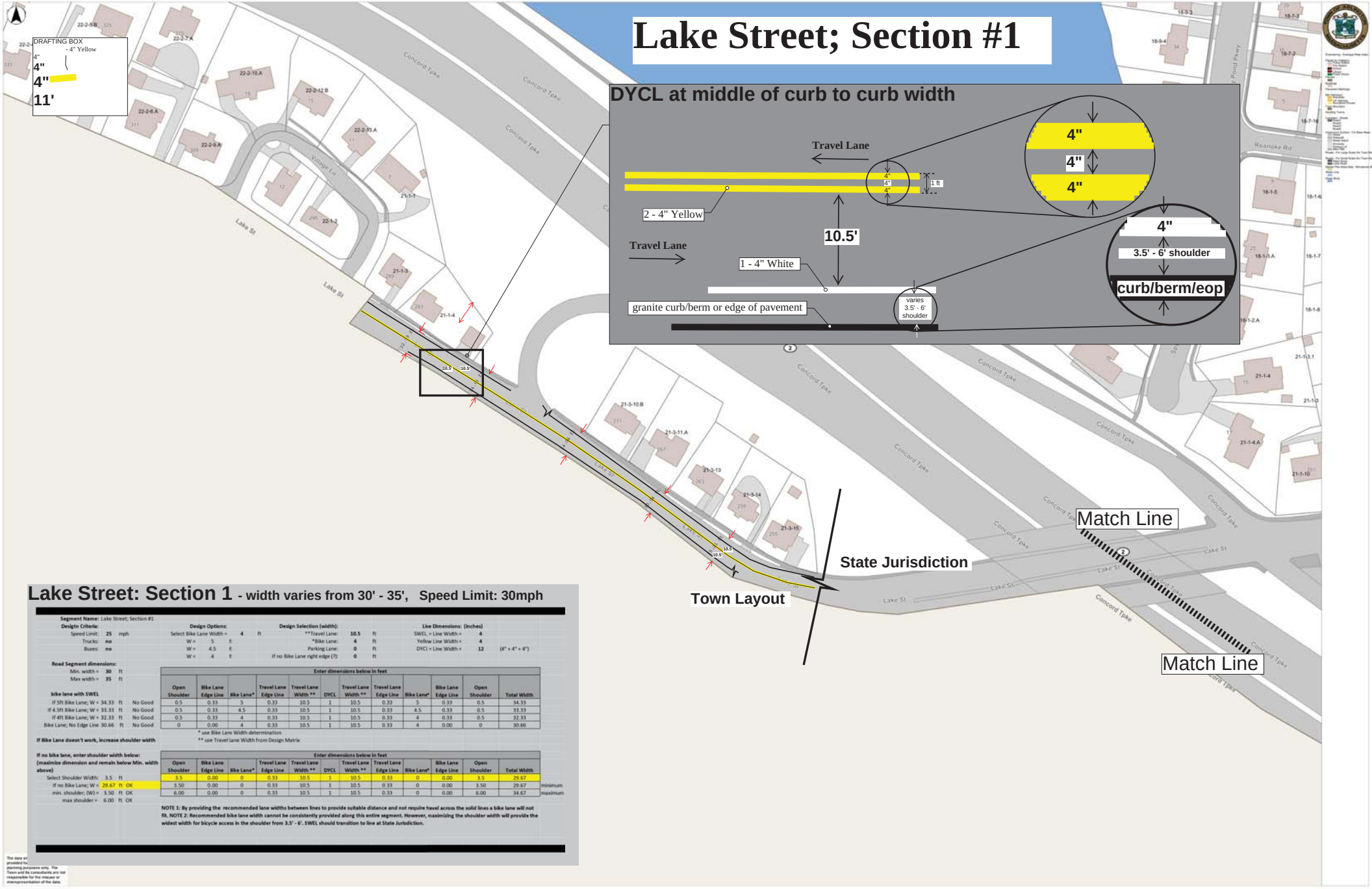
NOTE: By providing recommended lane widths between lines to provide suitable distance and not require travel across the solid line a bike lane will not fit, a shoulder 3.5ft - 6ft will be provided

* - Limited bus/truck traffic: fewer than 10 buses and trucks in each direction per weekday peak hour

** - Moderate bus/truck traffic: between 10-40 buses and trucks in each direction per weekday peak hour

*** - Frequent bus/truck traffic: more than 40 buses and trucks in each direction per weekday peak hour

Lake Street; Section #1



Lake Street: Section 1 - width varies from 30' - 35', Speed Limit: 30mph

Segment Name: Lake Street; Section #1

Design Criteria:			Design Options:			Design Selection (width):			Line Dimensions: (inches)		
Speed Limit:	25	mph	Select Bike Lane Width =	4	ft	**Travel Lane:	10.5	ft	SWEL = Line Width =	4	
Trucks:	no		W =	5	ft	*Bike Lane:	4	ft	Yellow Line Width =	4	
Buses:	no		W =	4.5	ft	Parking Lane:	0	ft	DYCL = Line Width =	12	(4" + 4" + 4")
			W =	4	ft	If no Bike Lane right edge (?):	0	ft			

Road Segment dimensions:
Min. width = 30 ft
Max width = 35 ft

Enter dimensions below in feet

bike lane with SWEL	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
If 5ft Bike Lane; W = 34.33 ft	0.5	0.33	5	0.33	10.5	1	10.5	0.33	5	0.33	0.5	34.33	No Good
If 4.5ft Bike Lane; W = 33.33 ft	0.5	0.33	4.5	0.33	10.5	1	10.5	0.33	4.5	0.33	0.5	33.33	No Good
If 4ft Bike Lane; W = 32.33 ft	0.5	0.33	4	0.33	10.5	1	10.5	0.33	4	0.33	0.5	32.33	No Good
Bike Lane; No Edge Line 30.66 ft	0	0.00	4	0.33	10.5	1	10.5	0.33	4	0.00	0	30.66	No Good

* use Bike Lane Width determination
** use Travel Lane Width from Design Matrix

If Bike Lane doesn't work, increase shoulder width

If no bike lane, enter shoulder width below: (maximize dimension and remain below Min. width above)

Enter dimensions below in feet

	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
Select Shoulder Width: 3.5 ft	3.5	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	3.5	29.67	
If no Bike Lane; W = 29.67 ft OK	3.50	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	3.50	29.67	minimum
min. shoulder; (W) = 3.50 ft OK	6.00	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	6.00	34.67	maximum
max shoulder = 6.00 ft OK													

NOTE 1: By providing the recommended lane widths between lines to provide suitable distance and not require travel across the solid lines a bike lane will not fit. NOTE 2: Recommended bike lane width cannot be consistently provided along this entire segment. However, maximizing the shoulder width will provide the widest width for bicycle access in the shoulder from 3.5' - 6'. SWEL should transition to line at State Jurisdiction.

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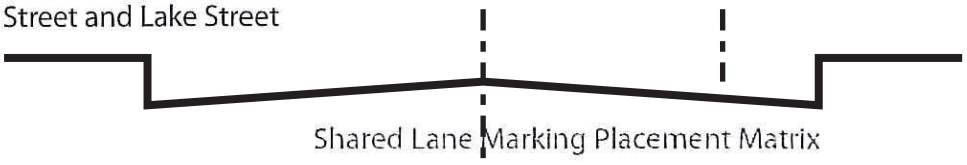
STREET Lake Street - section #2 **CURB-TO-CURB WIDTH** 30' - 34'

	YES	NO
1. Is the roadway part of the designated bike network* in the Town?	[X] Go to Question #2-4	[ ] Bike facility not necessary or appropriate
2. Parking allowed on both sides: is the roadway at least 44' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix
3. Parking allowed on one side: is the roadway at least 36' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix
3. Parking prohibited: is the roadway at least 28' in width	[X] Go to Bike Lane Design Guide	[ ] See Shared Lane Marking Matrix

* - network includes: Mass Ave, Park Ave, Summer Street, Lowell Street, Gray Street, Mill Street, Jason Street, Pleasant Street, Mystic Street, Mystic Valley Parkway (DCR), Medford Street, Broadway, Warren Street, Bates Road, River Street and Lake Street



Shared Lane Marking Placement Matrix

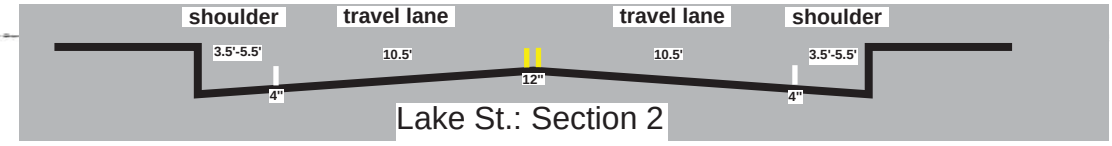
Posted or 85th percentile roadway speed (whichever is lower)	Shared lane marking placement	
	Curb-side travel lane < 13'	curb-side travel lane ≥ 13'
≤ 25 mph without parking	center of travel lane	4'-0" from curb
≤ 25 mph with parking	center of travel lane	11'-0" from curb
26 – 35 mph without parking	4'-0" from curb **	4'-0" from curb
26 – 35 mph with parking	11'-0" from curb **	11'-0" from curb
> 35 mph with or without parking	SLM not appropriate	SLM not appropriate

Matrix indicates Sharrow 4' from curb edge

** - there is a certain trade off that will need to be acknowledged as SLM placement 4' or 11' from the curb within travel lanes <13' will suffer more wear and tear, but very few cyclists should be encouraged to ride in the center of the travel lane when speeds typically exceed 26 mph.

Speed Limit; 30mph
Length ~1,230

No MBTA Bus Routes, Truck Exclusion



Lake St.: Section 2

DRAFT Context-sensitive Bike Lane Design Guide

Arlington BAC/TAC Roadway Restriping Working Group

STREET Lake Street; Section #2 **CURB-TO-CURB WIDTH** varies 30' - 34'

	NO	YES	
TRAVEL LANE →		X	start with: 10'-0"
Limited* or no bus/truck traffic?		X	no change
Moderate** bus/truck traffic?			add 6"
Frequent*** bus/truck traffic?			add12"
- OR -			
Typical traffic speeds <30 mph?			no change
Typical traffic speeds 30-40 mph?		X	add 6"
Typical traffic speeds >40 mph?			add 12"
SUB-TOTAL			**10.5'**
BIKE LANE →		X	start with: 5'-0"
Absence of curb-side parking?		X	OK to subtract 6"
Limited* or no bus/truck traffic?		X	OK to subtract 6"
Moderate** bus/truck traffic?			no change
Frequent*** bus/truck traffic?			add 6"
Typical traffic speeds <30 mph?			no change
Typical traffic speeds 30-40 mph?		X	no change
Typical traffic speeds >40 mph?			add 6"
SUB-TOTAL			**4.0'**
PARKING LANE None - No Parking Allowed →		X	start with: 7'-6"
No storefront retail along street?		X	OK to subtract 6"
Some areas of storefront retail?	X		no change
Continuous storefront retail?	X		add 6-12" depending on level of turnover
Significant downhill stretch? (higher cycling speeds when >2%)	X		add 6"
Significant uphill stretch? (lower cycling speeds when >2%)	X		OK to subtract 6"
SUB-TOTAL			**NA**

IDEAL TOTAL

NOTE: By providing recommended lane widths between lines to provide suitable distance and not require travel across the solid line a bike lane will not fit, a shoulder 3.5ft - 5.5ft will be provided

* - Limited bus/truck traffic: fewer than 10 buses and trucks in each direction per weekday peak hour

** - Moderate bus/truck traffic: between 10-40 buses and trucks in each direction per weekday peak hour

*** - Frequent bus/truck traffic: more than 40 buses and trucks in each direction per weekday peak hour

Lake Street; Section #2

Section widths vary from 30' - 34'

Segment Name: Lake Street; Section #2

Design Criteria:

Length:	1230	ft(*)
Speed Limit:	30	mph
Trucks:	no	
Buses:	no	

Road Segment dimensions:

Min. width =	30	ft
Max width =	34	ft

Design Options:

*Select Bike Lane Width =	4	ft
W =	5	ft
W =	4.5	ft
W =	4	ft

Design Selection (width):

**Travel Lane:	10.5	ft
*Bike Lane:	4	ft
Parking Lane:	0	ft
If no Bike Lane right edge (?):	0	ft

Like Dimensions: (inches)

SWEL = Line Width =	4	
Yellow Line Width =	4	
DYCL = Line Width =	12	(4" + 4" + 4")

Enter dimensions below in feet

bike lane with SWEL	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
If 5ft Bike Lane; W = 34.33 ft	0.5	0.33	5	0.33	10.5	1	10.5	0.33	5	0.33	0.5	34.33	No Good
If 4.5ft Bike Lane; W = 33.33 ft	0.5	0.33	4.5	0.33	10.5	1	10.5	0.33	4.5	0.33	0.5	33.33	No Good
If 4ft Bike Lane; W = 32.33 ft	0.5	0.33	4	0.33	10.5	1	10.5	0.33	4	0.33	0.5	32.33	No Good
Bike Lane; No Edge Line 30.66 ft	0	0.00	4	0.33	10.5	1	10.5	0.33	4	0.00	0	30.66	No Good

* use Bike Lane Width from Design Matrix
** use Travel Lane Width from Design Matrix

If Bike Lane doesn't work, increase shoulder width

If no bike lane, enter shoulder width below: (maximize dimension and remain below Min. width above)

Enter dimensions below in feet

	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
Select Shoulder Width: 3.5 ft	3.5	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	3.5	29.67	
If no Bike Lane; W = 29.67 ft OK	3.50	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	3.50	29.67	minimum
min. shoulder; (W) = 3.50 ft OK	5.50	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	5.50	33.67	maximum
max shoulder = 5.50 ft OK													

NOTE 1: By providing the recommended lane widths between lines to provide suitable distance and not require travel across the solid lines a Bike Lane will not fit. NOTE 2: Recommended bike lane width cannot be consistently provided along this entire segment. However, maximizing the shoulder width will provide the widest width for bicycle access in the shoulder area from 3.5' - 5.5'. Lines shall start consistent with lines at State Jurisdiction.

Match Line

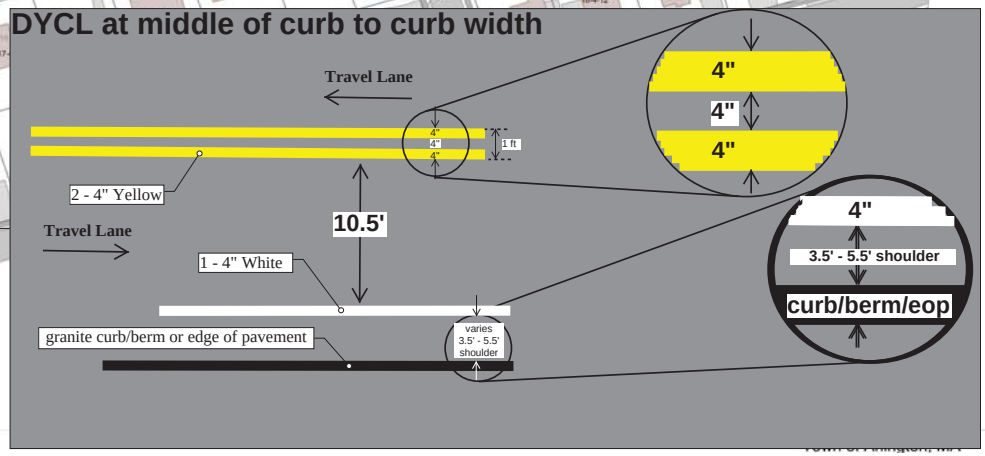
Match Line

Match Line

State Jurisdiction

Town Layout

DYCL at middle of curb to curb width



DRAFT Roadway Restriping Guide to Providing Bicycle Facilities

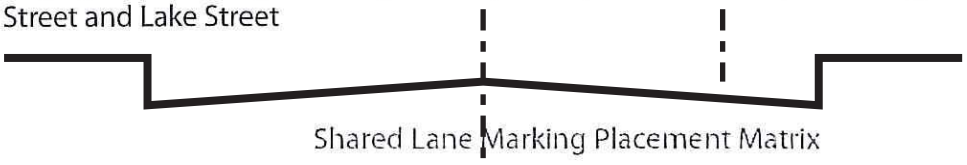
Arlington BAC/TAC Roadway Restriping Working Group

Homestead-Margaret/ Margaret - Brooks

STREET Lake Street - section #3 **CURB-TO-CURB WIDTH** 30'-31.5'/31'- 27'

	YES	NO
1. Is the roadway part of the designated bike network* in the Town?	[X] Go to Question #2-4	[ ] Bike facility not necessary or appropriate
2. Parking allowed on both sides: is the roadway at least 44' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix
3. Parking allowed on one side: is the roadway at least 36' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix
3. Parking prohibited: is the roadway at least 28' in width	[X] Go to Bike Lane Design Guide	[ ] See Shared Lane Marking Matrix

* - network includes: Mass Ave, Park Ave, Summer Street, Lowell Street, Gray Street, Mill Street, Jason Street, Pleasant Street, Mystic Street, Mystic Valley Parkway (DCR), Medford Street, Broadway, Warren Street, Bates Road, River Street and Lake Street



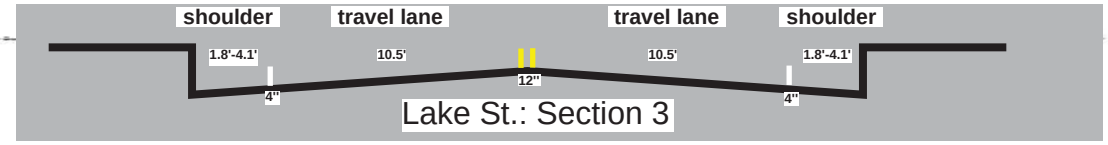
Shared Lane Marking Placement Matrix

Posted or 85th percentile roadway speed (whichever is lower)	Shared lane marking placement	
	Curb-side travel lane < 13'	curb-side travel lane ≥ 13'
≤ 25 mph without parking	center of travel lane	4'-0" from curb
≤ 25 mph with parking	center of travel lane	11'-0" from curb
26 – 35 mph without parking	4'-0" from curb **	4'-0" from curb
26 – 35 mph with parking	11'-0" from curb **	11'-0" from curb
> 35 mph with or without parking	SLM not appropriate	SLM not appropriate

Matrix indicates Sharrow 4' from curb edge

** - there is a certain trade off that will need to be acknowledged as SLM placement 4' or 11' from the curb within travel lanes <13' will suffer more wear and tear, but very few cyclists should be encouraged to ride in the center of the travel lane when speeds typically exceed 26 mph.

No MBTA Bus Routes,
Truck Exclusion
Speed Limit; 30mph
Section 3A; Length ~880ft
Section 3B; Length ~350ft



DRAFT Context-sensitive Bike Lane Design Guide

Arlington BAC/TAC Roadway Restriping Working Group

Homestead-Margaret/ Margaret - Brooks

STREET Lake Street - section #3A / #3B

CURB-TO-CURB WIDTH 30'-31.5'/31'- 27'

	NO	YES	
TRAVEL LANE →		X	start with: 10'-0"
Limited* or no bus/truck traffic?	☐	X	no change
Moderate** bus/truck traffic?	☐	☐	add 6"
Frequent*** bus/truck traffic?	☐	☐	add12"
- OR -			
Typical traffic speeds <30 mph?	☐	☐	no change
Typical traffic speeds 30-40 mph?	☐	X	add 6"
Typical traffic speeds >40 mph?	☐	☐	add 12"
SUB-TOTAL		**10.5'**	

Section #3A

NOTE: By providing recommended lane widths between lines and not allowing travel across the solid lines a bike lane will not fit. A shoulder 3.5'-4' will be provided.

	NO	YES	
BIKE LANE →		X	start with: 5'-0"
Absence of curb-side parking?	☐	X	OK to subtract 6"
Limited* or no bus/truck traffic?	☐	X	OK to subtract 6"
Moderate** bus/truck traffic?	☐	☐	no change
Frequent*** bus/truck traffic?	☐	☐	add 6"
Typical traffic speeds <30 mph?	☐	☐	no change
Typical traffic speeds 30-40 mph?	☐	X	no change
Typical traffic speeds >40 mph?	☐	☐	add 6"
SUB-TOTAL		**4'**	

Section #3B

NOTE: By providing recommended lane widths between lines and not allowing travel across the solid lines a bike lane will not fit. A shoulder 2' - 4' will be provided.

PARKING LANE	**None - No Parking Allowed** →	X	start with: 7'-6"
No storefront retail along street?	☐	X	OK to subtract 6"
Some areas of storefront retail?	X	☐	no change
Continuous storefront retail?	X	☐	add 6-12" depending on level of turnover
Significant downhill stretch? (higher cycling speeds when >2%)	X	☐	add 6"
Significant uphill stretch? (lower cycling speeds when >2%)	X	☐	OK to subtract 6"
SUB-TOTAL		**NA**	

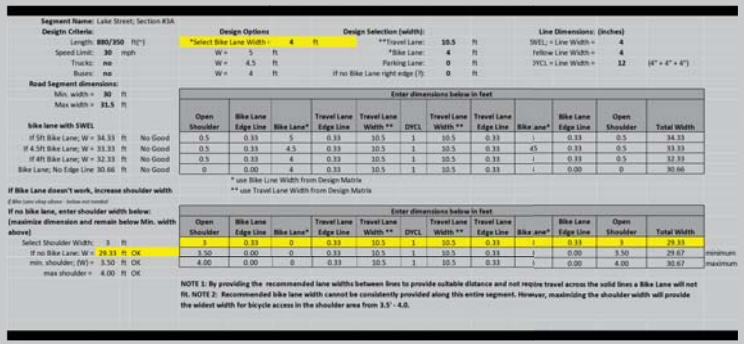
IDEAL TOTAL ☐

* - Limited bus/truck traffic: fewer than 10 buses and trucks in each direction per weekday peak hour

** - Moderate bus/truck traffic: between 10-40 buses and trucks in each direction per weekday peak hour

*** - Frequent bus/truck traffic: more than 40 buses and trucks in each direction per weekday peak hour

Section #3A widths vary from 30' - 31.5'



Segment Name: Lake Street; Section #3A

Design Criteria: Length: 880/350 ft(+) | Speed Limit: 30 mph | Trucks: no | Buses: no

Road Segment dimensions: Min. width = 30 ft | Max width = 31.5 ft

Design Options: *Select Bike Lane Width = 4 ft | W= 5 ft | W= 4.5 ft | W= 4 ft

Design Selection (width): **Travel Lane: 10.5 ft | *Bike Lane: 4 ft | Parking Lane: 0 ft | If no Bike Lane right edge (?): 0 ft

Line Dimensions: (inches): SWEL = Line Width = 4 | Yellow Line Width = 4 | 2YCL = Line Width = 12 (4" + 4" + 4")

Enter dimensions below in feet

bike lane with SWEL

	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
If 5ft Bike Lane; W = 34.33 ft	0.5	0.33	5	0.33	10.5	1	10.5	0.33	1	0.33	0.5	34.33	No Good
If 4.5ft Bike Lane; W = 33.33 ft	0.5	0.33	4.5	0.33	10.5	1	10.5	0.33	45	0.33	0.5	33.33	No Good
If 4ft Bike Lane; W = 32.33 ft	0.5	0.33	4	0.33	10.5	1	10.5	0.33	1	0.33	0.5	32.33	No Good
Bike Lane; No Edge Line 30.66 ft	0	0.00	4	0.33	10.5	1	10.5	0.33	1	0.00	0	30.66	No Good

If Bike Lane doesn't work, increase shoulder width

* use Bike Line Width from Design Matrix

** use Travel Lane Width from Design Matrix

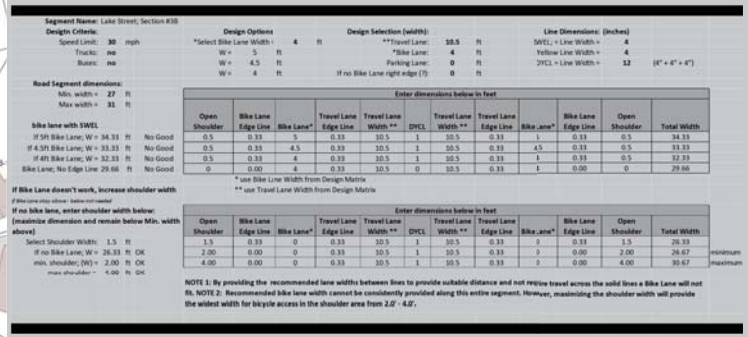
Enter dimensions below in feet

If no bike lane, enter shoulder width below: (maximize dimension and remain below Min. width above)

	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
Select Shoulder Width: 3 ft	3	0.33	0	0.33	10.5	1	10.5	0.33	1	0.33	3	29.33	
If no Bike Lane: W = 29.33 ft OK	3.50	0.00	0	0.33	10.5	1	10.5	0.33	1	0.00	3.50	29.67	minimum
min. shoulder; (W) = 3.50 ft OK	4.00	0.00	0	0.33	10.5	1	10.5	0.33	1	0.00	4.00	30.67	maximum
max shoulder = 4.00 ft OK													

NOTE 1: By providing the recommended lane widths between lines to provide suitable distance and not require travel across the solid lines a Bike Lane will not fit. NOTE 2: Recommended bike lane width cannot be consistently provided along this entire segment. However, maximizing the shoulder width will provide the widest width for bicycle access in the shoulder area from 3.5' - 4.0.

Section #3B widths vary from 27' - 31'



Segment Name: Lake Street; Section #3B

Design Criteria: Speed Limit: 30 mph | Trucks: no | Buses: no

Road Segment dimensions: Min. width = 27 ft | Max width = 31 ft

Design Options: *Select Bike Lane Width = 4 ft | W= 5 ft | W= 4.5 ft | W= 4 ft

Design Selection (width): **Travel Lane: 10.5 ft | *Bike Lane: 4 ft | Parking Lane: 0 ft | If no Bike Lane right edge (?): 0 ft

Line Dimensions: (inches): SWEL = Line Width = 4 | Yellow Line Width = 4 | 2YCL = Line Width = 12 (4" + 4" + 4")

Enter dimensions below in feet

bike lane with SWEL

	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
If 5ft Bike Lane; W = 34.33 ft	0.5	0.33	5	0.33	10.5	1	10.5	0.33	1	0.33	0.5	34.33	No Good
If 4.5ft Bike Lane; W = 33.33 ft	0.5	0.33	4.5	0.33	10.5	1	10.5	0.33	4.5	0.33	0.5	33.33	No Good
If 4ft Bike Lane; W = 32.33 ft	0.5	0.33	4	0.33	10.5	1	10.5	0.33	1	0.33	0.5	32.33	No Good
Bike Lane; No Edge Line 29.66 ft	0	0.00	4	0.33	10.5	0	10.5	0.33	1	0.00	0	29.66	

If Bike Lane doesn't work, increase shoulder width

* use Bike Line Width from Design Matrix

** use Travel Lane Width from Design Matrix

Enter dimensions below in feet

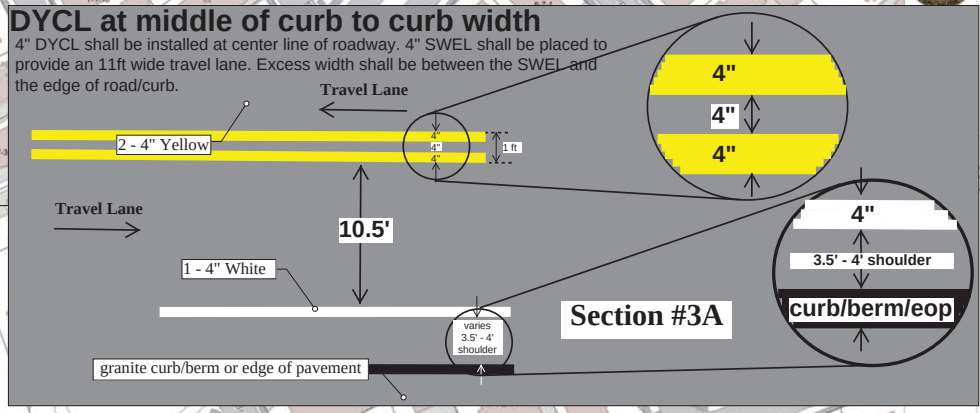
If no bike lane, enter shoulder width below: (maximize dimension and remain below Min. width above)

	Open Shoulder	Bike Lane Edge Line	Bike Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
Select Shoulder Width: 1.5 ft	1.5	0.33	0	0.33	10.5	1	10.5	0.33	0	0.33	1.5	26.33	
If no Bike Lane; W = 26.33 ft OK	2.00	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	2.00	26.67	minimum
min. shoulder; (W) = 2.00 ft OK	4.00	0.00	0	0.33	10.5	1	10.5	0.33	0	0.00	4.00	30.67	maximum
max shoulder = 4.00 ft OK													

NOTE 1: By providing the recommended lane widths between lines to provide suitable distance and not require travel across the solid lines a Bike Lane will not fit. NOTE 2: Recommended bike lane width cannot be consistently provided along this entire segment. However, maximizing the shoulder width will provide the widest width for bicycle access in the shoulder area from 2.0' - 4.0'.

DYCL at middle of curb to curb width

4" DYCL shall be installed at center line of roadway. 4" SWEL shall be placed to provide an 11ft wide travel lane. Excess width shall be between the SWEL and the edge of road/curb.



Match Line

Segment Boundary

Match Line

BIKE PATH

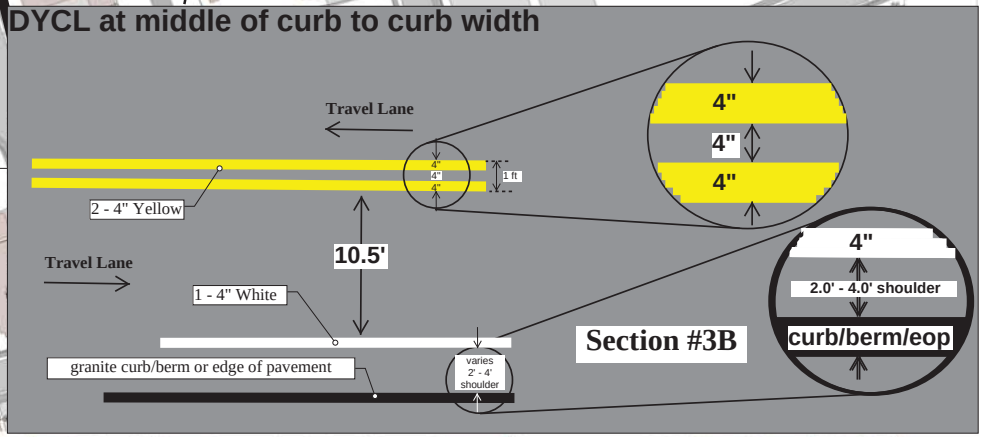
Section #3B

Match Line

Section #3A

Match Line

DYCL at middle of curb to curb width



Lake Street; Section #3A - #3B

Town of Arlington, MA

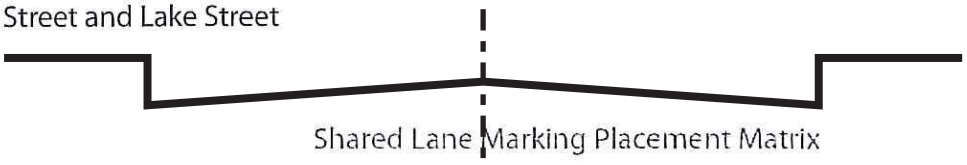
DRAFT Roadway Restriping Guide to Providing Bicycle Facilities

Arlington BAC/TAC Roadway Restriping Working Group

STREET Lake Street - section #4 **CURB-TO-CURB WIDTH** 26 - 27ft

	YES	NO
1. Is the roadway part of the designated bike network* in the Town?	[X] Go to Question #2-4	[ ] Bike facility not necessary or appropriate
2. Parking allowed on both sides: is the roadway at least 44' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix
3. Parking allowed on one side: is the roadway at least 36' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix
3. Parking prohibited: is the roadway at least 28' in width	[ ] Go to Bike Lane Design Guide	[X] See Shared Lane Marking Matrix

* - network includes: Mass Ave, Park Ave, Summer Street, Lowell Street, Gray Street, Mill Street, Jason Street, Pleasant Street, Mystic Street, Mystic Valley Parkway (DCR), Medford Street, Broadway, Warren Street, Bates Road, River Street and Lake Street

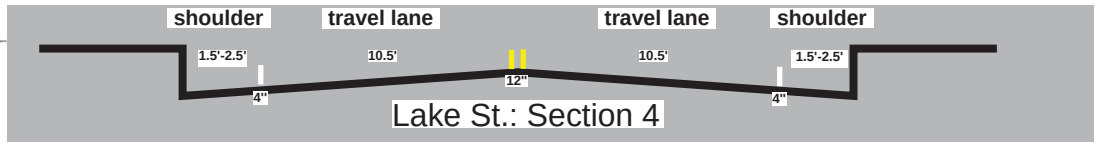


Shared Lane Marking Placement Matrix

Posted or 85th percentile roadway speed (whichever is lower)	Shared lane marking placement	
	Curb-side travel lane < 13'	curb-side travel lane ≥ 13'
≤ 25 mph without parking	center of travel lane	4'-0" from curb
≤ 25 mph with parking	center of travel lane	11'-0" from curb
26 – 35 mph without parking	4'-0" from curb **	4'-0" from curb
26 – 35 mph with parking	11'-0" from curb **	11'-0" from curb
> 35 mph with or without parking	SLM not appropriate	SLM not appropriate

** - there is a certain trade off that will need to be acknowledged as SLM placement 4' or 11' from the curb within travel lanes <13' will suffer more wear and tear, but very few cyclists should be encouraged to ride in the center of the travel lane when speeds typically exceed 26 mph.

No MBTA Bus Routes,
Truck Exclusion
Speed Limit; 30mph
Length ~ 950 ft



DRAFT Context-sensitive Bike Lane Design Guide

Arlington BAC/TAC Roadway Restriping Working Group

STREET Lake Street - section #4 **CURB-TO-CURB WIDTH** 26' - 28'

	NO	YES	
TRAVEL LANE →		X	start with: 10'-0"
Limited* or no bus/truck traffic?		X	no change
Moderate** bus/truck traffic?			add 6"
Frequent*** bus/truck traffic?			add12"
- OR -			
Typical traffic speeds <30 mph?			no change
Typical traffic speeds 30-40 mph?		X	add 6"
Typical traffic speeds >40 mph?			add 12"
SUB-TOTAL			**10.5'**
BIKE LANE →		X	start with: 5'-0"
Absence of curb-side parking?		X	OK to subtract 6"
Limited* or no bus/truck traffic?		X	OK to subtract 6"
Moderate** bus/truck traffic?			no change
Frequent*** bus/truck traffic?			add 6"
Typical traffic speeds <30 mph?		X	no change
Typical traffic speeds 30-40 mph?			no change
Typical traffic speeds >40 mph?			add 6"
SUB-TOTAL			**4'**
PARKING LANE **None - No Parking Allowed** →		X	start with: 7'-6"
No storefront retail along street?		X	OK to subtract 6"
Some areas of storefront retail?	X		no change
Continuous storefront retail?	X		add 6-12" depending on level of turnover
Significant downhill stretch? (higher cycling speeds when >2%)	X		add 6"
Significant uphill stretch? (lower cycling speeds when >2%)	X		OK to subtract 6"
SUB-TOTAL			**NA**

IDEAL TOTAL

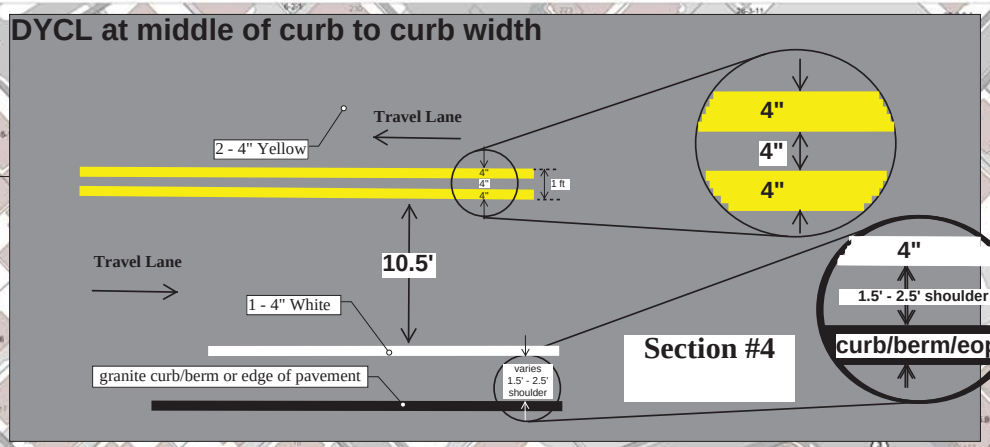
NOTE: By providing recommended lane widths between lines to provide suitable distance and not require travel across the solid line a bike lane will not fit, a shoulder 1.5ft-2.5ft will be provided

* - Limited bus/truck traffic: fewer than 10 buses and trucks in each direction per weekday peak hour

** - Moderate bus/truck traffic: between 10-40 buses and trucks in each direction per weekday peak hour

*** - Frequent bus/truck traffic: more than 40 buses and trucks in each direction per weekday peak hour

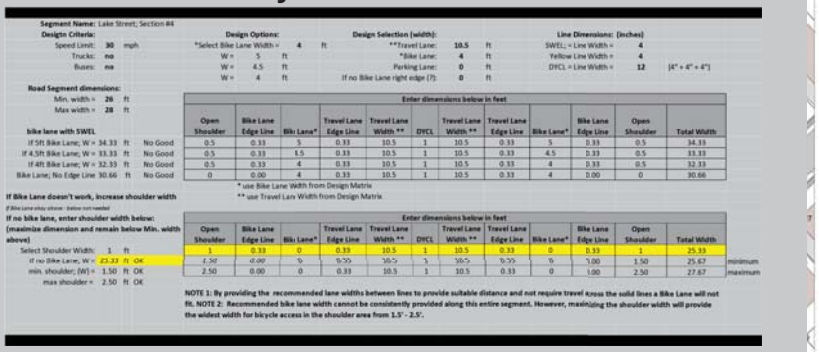
Lake Street; Section #4



Match Line

Match Line

Section #4: widths vary from 26' - 27'



Segment Name: Lake Street; Section #4

Design Criteria: Speed Limit: 30 mph; Trucks: no; Buses: no

Road Segment dimensions: Min. width = 26 ft; Max width = 28 ft

Design Options: *Select Bike Lane Width = 4 ft; W = 5 ft; W = 4.5 ft; W = 4 ft

Design Selection (width): **Travel Lane: 10.5 ft; *Bike Lane: 4 ft; Parking Lane: 0 ft; If no Bike Lane right edge (7): 0 ft

Line Dimensions: (inches): SWEL = Line Width = 4; Yellow Line Width = 4; DYCL = Line Width = 12 (4" + 4" + 4")

Enter dimensions below in feet

bike lane with SWEL	Open Shoulder	Bike Lane Edge Line	Bik Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
If 5ft Bike Lane; W = 34.33 ft		0.5	0.33	5	0.33	10.5	1	10.5	0.33	5	0.33	0.5	34.33	No Good
If 4.5ft Bike Lane; W = 33.33 ft		0.5	0.33	4.5	0.33	10.5	1	10.5	0.33	4.5	0.33	0.5	33.33	No Good
If 4ft Bike Lane; W = 32.33 ft		0.5	0.33	4	0.33	10.5	1	10.5	0.33	4	0.33	0.5	32.33	No Good
Bike Lane; No Edge Line 30.66 ft		0	0.00	4	0.33	10.5	1	10.5	0.33	4	0.00	0	30.66	No Good

* use Bike Lane Width from Design Matrix

** use Travel Lane Width from Design Matrix

If Bike Lane doesn't work, increase shoulder width

If no bike lane, enter shoulder width below: (maximize dimension and remain below Min. width above)

Enter dimensions below in feet

	Open Shoulder	Bike Lane Edge Line	Bik Lane*	Travel Lane Edge Line	Travel Lane Width **	DYCL	Travel Lane Width **	Travel Lane Edge Line	Bike Lane*	Bike Lane Edge Line	Open Shoulder	Total Width	
Select Shoulder Width: 1 ft	1	0.33	0	0.33	10.5	1	10.5	0.33	0	0.33	1	25.33	
If no Bike Lane; W = 23.33 ft OK	1.50	0.00	0	0.33	10.5	1	10.5	0.33	0	1.00	1.50	25.67	minimum
min. shoulder; (W) = 1.50 ft OK	2.50	0.00	0	0.33	10.5	1	10.5	0.33	0	1.00	2.50	27.67	maximum
max shoulder = 2.50 ft OK													

NOTE 1: By providing the recommended lane widths between lines to provide suitable distance and not require travel across the solid lines a Bike Lane will not fit. NOTE 2: Recommended bike lane width cannot be consistently provided along this entire segment. However, maximizing the shoulder width will provide the widest width for bicycle access in the shoulder area from 1.5' - 2.5'.